What is claimed is:

1

2

3

4

1

- 1. A timing device comprising a carrier having at least one code track of a group and, overlapping therewith, at least one code marking, which is scanned by a sensor unit to produce signals, wherein the at least one code track has a different optical density compared to the first group, and wherein the code markings within a code track overlap.
 - 2. The timing device according to claim 1, wherein the first group and additional groups of code markings are scanned by the same sensor-emitter-unit.
 - 3. The timing device according to claim 2, wherein the code markings of the first group overlap with those of the additional groups within the code track.
 - 4. The timing device according to claim 3, wherein the sensor unit comprises a light source and a light sensitive sensing device
 - 5. The timing device according to claim 4, wherein in the sensor unit a two-channel evaluation of the optical signals is performed.

2

3

4

2

3

4

1

2

- The timing device according to one of the preceding claims, wherein the first 1 a group of code markings has a predetermined optical density and the additional groups of code markings have optical densities different from that of the first group, with the code markings having a detectable grading for generating control or position signals.
 - 7. The timing device according to claim 6, wherein the groups of code markings have a predefined difference in their optical density.
 - 8. The timing device according to claim7, wherein the optical density corresponds to different gray levels which can span a range between light-blocking and almost complete transparency.
 - 9. The timing device according to claim 8, wherein the carrier of the timing device is made of a reflecting material and the code markings have a different degree of reflectivity.
 - 10. The timing device according to claims 9, wherein the code markings of the first group have a mutually constant spacing from one another, whereas the code markings of a second and subsequent group are distributed over the code track with an arbitrary spacing and are forming segments on the timing disk or the timing ruler for controlling different functions.

11. The timing device according to claim 10, wherein the code markings of the second and subsequent group are used for controlling one of a start and an end position, for one of calibration purposes and for absolute positioning.

- 12. A positioning device, comprising a timing device with a carrier having a first group of code markings in at least one code track, with the code markings being scanned by at least one sensor unit for producing a signal, and comprising a signal processing device, the signal processing device converts the sensor signal into a control signal and is connected after the sensor unit.
 - 13. The timing device according to claim 4, wherein the light source is a LED.
- 14. The timing device according to claim 4, wherein the light sensitive sensing device is at least one photo transistor.
- 15. The timing device according to claim 5, wherein in the sensor unit performs a multi-channel evaluation of the optical signals is performed.